

Notice of Allowability

Application No.

10/717,381

Applicant(s)

MAHISHI ET AL.

Examiner

Art Unit

Yong D. Pak

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on August 17, 2005.
2. ☒ The allowed claim(s) is/are 6,7,9-11,13 and 15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

This application is a divisional of 09/772,304, which issued as US Patent 6,756,222.

The after final amendment filed on August 17, 2005, canceling claim 14 and amending claims 6, 11 and 13, has been entered.

Claims 6-7, 9-11, 13 and 15 are pending and are under consideration.

Response to Arguments

Applicant's amendment and arguments filed on August 17, 2005, have been fully considered and are deemed to be persuasive to overcome the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Nguyen on October 26, 2005.

The application has been amended as follows:

IN THE CLAIMS:

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Replace claims 6, 7 and 13 with the following:

6. A method for producing poly-beta-hydroxybutyrate, said method comprising:

- (i) isolating a nucleic acid encoding the proteins responsible for [[a]] poly-beta-hydroxybutyrate ~~biosynthetic pathway~~ synthesis from *Streptomyces aureofaciens* NRRL2209 comprising β -ketothiolase, acetoacetyl-CoA reductase, and PHB synthase, wherein the nucleic acid comprises SEQ ID NO:1,
- (ii) cloning said nucleic acid into a plasmid vector to obtain a recombinant vector,
- (iii) transforming *Escherichia coli* with said recombinant vector to obtain recombinant *Escherichia coli* which expresses said proteins responsible for poly-beta-hydroxybutyrate synthesis,
- (iv) culturing said recombinant *Escherichia coli* in a conventional medium comprising glycerol and one or more substrates and
- (v) recovering said poly-beta-hydroxybutyrate ~~from said recombinant *Escherichia coli*.~~

7. The method according to claim 6 wherein the nucleic acid encoding the proteins responsible for poly-beta-hydroxybutyrate synthesis ~~biosynthetic~~ pathway is a 4.826 Kb fragment.

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13. The method according to claim 6 wherein the recombinant *Escherichia coli* produces poly-beta-hydroxybutyrate is produced in recoverable quantities of at least about 60% (w/w) of the recombinant *E. coli* dry cell mass.

Allowable Subject Matter

Claims 6-7, 9-11, 13 and 15 are allowed.

The Declaration filed on August 17, 2005 satisfies the biological deposit requirements of plasmids pSa240 and pGEM-3Z.

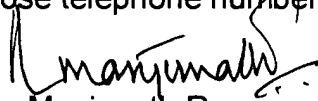
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 571-272-0935. The examiner can normally be reached 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Yong D. Pak
Patent Examiner 1652


Manjunath Rao
Primary Patent Examiner 1652